AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0008] with the following amended paragraph:

[0008] According to the present invention, a one-way, bi-directional clutch, includes an outer casing, an input shaft, an output shaft and a brake assembly. The outer casing has a first end. The input shaft is rotationally supported by the first end of the outer casing and has a flange with an integral release cam means. The output shaft is rotationally supported by the second end of the outer casing and has a flange with an integral locking cam means. The brake assembly includes a release cam means that is ~~complimentary~~complementary to the release cam means of the input shaft, a locking cam means that is ~~complimentary~~complementary to the locking cam means of the output shaft, and at least one brake pad. The brake assembly is movable between a brake position where the one or more brake pads are in contact with the first end of the outer casing and a release position where the one or more brake pads are not in contact with the first end of the outer casing. The ~~complimentary~~complementary release cam means of the input shaft and brake assembly are operable to move the brake assembly to the release position when the torque applied to the input shaft is greater than the torque applied to the output shaft. The locking cam is operable to move the one or more brake pads to the brake position when the torque applied to the output shaft is greater than the torque applied to the input shaft. When the brake assembly is in the brake position, torque on the output shaft is not translated to the input shaft. When the brake assembly is in the release position, torque on the input shaft is permitted to translate to the output shaft.

Please replace paragraph [0009] with the following amended paragraph:

[0009] According to one aspect of the present invention, the one-way bi-directional clutch (OWBD) of the present invention may also act as a torque limiter. The dimensions of the ~~complimentary~~complementary locking cam means may be designed to limit the amount of force imparted by the brake assembly when in the braking position. Therefore, the OWBD clutch may be designed to have a "slip

point", where the brake pads will "slip" along first end of the outer casing once a pre-determined amount of torque is placed on the output shaft.

Please replace paragraph [0018] with the following amended paragraph:

[0018] FIG. 7 is a cross-sectional view (rotated 90 degrees) of the flange along line 7-7 of FIG. 2 depicting the output shaft and the floating locking plate wherein a bearing is located in the deep portion of the ~~complimentary~~complementary locking cam divots;

Please replace paragraph [0019] with the following amended paragraph:

[0019] FIG. 7A is a cross-sectional view (rotated 90 degrees) of the flange along line 7A-7A of FIG. 2A depicting the output shaft and the floating locking plate wherein the bearing is located in the shallow portion of the ~~complimentary~~complementary locking cam divots;

Please replace paragraph [0020] with the following amended paragraph:

[0020] FIG. 8 is a cross-sectional view (rotated 90 degrees) of the flange along line 8-8 of FIG. 2 depicting the input shaft and the locking disc wherein the bearing is located in the deep portion of the ~~complimentary~~complementary release cam divots.

Please replace paragraph [0021] with the following amended paragraph:

[0021] FIG. 8A is a cross-sectional view (rotated 90 degrees) of the flange along line 8A-8A of FIG. 2A depicting the input shaft and the locking disc wherein the bearing is located in the shallow portion of the ~~complimentary~~complementary release cam divots; and

Please replace paragraph [0027] with the following amended paragraph:

[0027] Referring to FIGS. 2, 2A and 3, the input shaft 14 extends through the first end 20 of the outer casing 12. The input shaft 14 includes a flange 36 and an integral release cam means 38. The flange 36 is typically circular, as shown in FIG. 3. The release cam means 38 is located on the flange and is operable to work in concert with a ~~complimentary~~complementary release cam means (discussed below) on the brake assembly 18 such that the brake assembly 18 is urged toward a release position (as shown in FIG. 2 and discussed below) when torque is placed on the input shaft 14.

Please replace paragraph [0034] with the following amended paragraph:

[0034] The floating locking plate 70 is positioned around the input shaft 14 adjacent to the flange 50 of the output shaft 16. The floating locking plate 70 has a first side 80 that includes an integral locking cam means 82 that is ~~complimentary~~complementary to the locking cam means 52 of the flange of the output shaft 16. Together, the locking cam means 52 of the output shaft 16 and the locking cam means 82 of the floating locking plate 70 are operable to urge the brake assembly 18 toward the brake position (shown in FIG. 2A) when the output shaft 16 and the floating locking plate 70 are rotated relative to one another. A second side 84 of the floating locking plate 70 includes a bore 86 to accommodate each one of the one or more roll pins 76. In some embodiments, the second side 84 of the floating locking plate 70 also includes a bore 87 sized to seat one end of the second biasing member 72.

Please replace paragraph [0036] with the following amended paragraph:

[0036] Referring to FIGS. 7 and 7A, in embodiments utilizing locking cam divots 88,60 in the floating lock plate 70 and the output shaft 16, a bearing 96 is disposed between the corresponding locking cam divots 88,60. The bearing 96 is typically spherical and operable to move within the locking cam divots 88,60 when the floating locking plate 70 and the output shaft 16 rotate relative to one another. When the floating locking plate 70 and the output shaft 16 are rotated relative to one

another, the bearing 96 moves from the deep portion 66,94 of the locking cam divots 60,88 (FIG. 7) to one of the shallow portions 62,64,90,92 of the locking cam divots 60,88 (FIG. 7A). Therefore, when the bearing 96 is in the deep portion 66,94 of the ~~complimentary~~complementary locking cam divots 60,88, the floating locking plate 70 and the flange 60 of the output shaft 16 are located closer to one another, as shown in FIG. 7, as compared to when the bearing 96 is in the one of the shallow portion 62,64,90,92 of the ~~complimentary~~complementary locking cam divots 60,88, as shown in FIG. 7A.

Please replace paragraph [0038] with the following amended paragraph:

[0038] The locking disk 74 is positioned around the input shaft 16 between the second biasing member 72 and the flange 36 of the input shaft 14. The locking disc 74 has a first side 98. The radius of the locking disc 74 is greater than the radius of the flange 36 of the input shaft 14 such that a portion of the locking disc 74 extends outward radially beyond the flange 36 of the input shaft 14. The locking disc 74 also includes one or more bores 100 to accommodate each roll pin 76, as shown in FIG. 2. The first side 98 of the locking disc 74 includes an integral release cam means 102 that is ~~complimentary~~complementary to the release cam means 38 of the input shaft 16. Together, the release cam means 38 of the input shaft 16 and the release cam means 102 of the locking disc 74 are operable to urge the brake assembly 18 toward the release position when the input shaft 16 and the locking disc 74 are rotated relative to one another.

Please replace paragraph [0040] with the following amended paragraph:

[0040] Referring to FIGS. 8 and 8A, in embodiments utilizing release cam divots 40,104 on the input shaft 14 and the locking disc 74, a bearing 112 is disposed between the corresponding release cam divots 40,104. The bearing 112 is operable to move within the ~~complimentary~~complementary release cam divots 40,104 when the locking disc 74 and the input shaft 16 rotate relative to one another. Depending on the relative position, the bearing 112 moves from the deep portion 46,110 of each of the ~~complimentary~~complementary release cam divots 40,104 to

one of the shallow portions 42,44,106,108. Therefore, when the bearing 112 is in the deep portions 46,110 of the ~~complimentary~~complementary release cam divots 40,104, the locking disc 74 and the flange 36 of the input shaft 16 are located closer to one another, as shown in FIG. 8, as compared to when the bearing 112 is located in the shallow portions 42,44,106,108, as shown in FIG. 8A.

Please replace paragraph [0041] with the following amended paragraph:

[0041] The ~~complimentary~~complementary locking cam means 52,82 of the output shaft 16 and the floating locking plate 70 and ~~complimentary~~complementary release cam means 38,102 of the input shaft 14 and the locking disc 74 are not to be considered limited to the specific embodiment described above. Each of the locking cam means 52,82 and the release cam means 38,102 may include any camming system known to those of skill in the art. Known camming systems include, but are not limited to, those utilizing roller ramps, offset rollers, and pinned cams and linkages.

Please replace paragraph [0042] with the following amended paragraph:

[0042] The one or more roll pins 76 extend between the bores 86 in the floating locking plate 70 and the bores 100 in the locking disc 74. The roll pins 76 are typically cylindrical bodies that are operable to allow the floating locking plate 70 to move axially along the input shaft 14 relative to the locking disc 74, and to prevent the floating locking plate 70 and the locking disc 74 from rotating relative to one another. Each of the one or more roll pins 76 is secured in one of the floating locking plate 70 or the locking disc 74 and slip fitted in the other.

Please replace paragraph [0046] with the following amended paragraph:

[0046] According to one aspect of the present invention, the OWBD clutch 10 of the present invention may also act as a torque limiter. In these embodiments, the dimensions of the ~~complimentary~~complementary locking cam means 52,82 may be designed to limit the amount of force imparted on the first end 20 of the outer casing 12 by the brake pads 78 when the brake assembly 18 is in the braking position.

Therefore, the OWBD clutch 10 may be designed to define a "slip point", where the brake pads 78 will "slip" along first end 20 of the outer casing 12 once a pre-determined amount of torque is placed on the output shaft 16. In embodiments utilizing bearings 96 and ~~complimentary~~complementary locking cam divots 60,88, the depth of the shallow portion 62,64,90,92 of the ~~complimentary~~complementary locking cam divots 60,88 can be designed such that a "slip point" is created once a pre-determined torque is applied on the output shaft 16. Without the pre-determined slip point, the torque on the output shaft 16 can increase until one or more components of the OWBD clutch 10 undesirably fails.

Please replace paragraph [0049] with the following amended paragraph:

[0049] When sufficient torque is placed on the input shaft 14 (*e.g.*, any torque greater than the torque placed on the output shaft 16), the flange 36 of the input shaft 14 rotates relative to the locking disc 74. The relative motion of the input shaft 14 and the locking disc 74 causes the ~~complimentary~~complementary release cam means 38,102 to force the locking disc 74 to move away from the first end 20 of the outer casing 12 and away from the flange 36 of the input shaft 13. In embodiments utilizing one or more bearings 112 disposed between the release cam divots 40,104 of the input shaft 14 and the locking disc 74, the relative motion of the input shaft 14 and the locking disc 74 forces the one or more bearings 112 to travel toward the shallow portion 42,44,106,108 of the release cam divots 40,104, as shown in FIG. 8A. In all embodiments, the movement of the locking disc 74 compresses the first and second biasing members 69,72, thereby relieving any force that was forcing the one or more brake pads 78 against the first end 20 of the outer casing 12. Accordingly, the one or more brake pads 78 to move to the release position and away from the first end 20 of the outer casing 12. Once the brake pads 78 are free from contact with the first end 20 of the outer casing 12, the OWBD clutch 10 is able to translate torque applied on the input shaft 14 to the output shaft 16.

Please replace paragraph [0050] with the following amended paragraph:

[0050] When sufficient torque is placed on the output shaft 16 (*e.g.*, any torque greater than the torque placed on the input shaft), the flange 50 of the output shaft 16 rotates relative to the floating locking plate 70. The relative motion forces the locking cam means 52,82 of the floating locking plate 70 and the output shaft 16 to move the floating locking plate 70 toward the first end 20 of the outer casing 12. In embodiments utilizing one or more bearings 96 disposed between ~~complimentary~~complementary locking cam divots 60,88 in the output shaft 16 and the floating locking plate 70, the relative motion forces each bearing 96 to travel toward the shallow portion 62,64,90,92 of each of the locking cam divots 60,88, as shown in FIG. 7A. In all embodiments, the movement of the floating locking plate 70 forces the second bias member 72 and, accordingly, the locking disc 74 to move towards the first end 20 of the outer casing 12 such that at least one brake pad 78 is in contact with the first end 20 of the casing 12. Once the one or more brake pads 78 are in the brake position, the OWBD clutch 10 is unable to translate torque applied on the output shaft 16 to the input shaft 14.